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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/730,548	12/07/2000	Chulhee Lee	9540			
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Chulhee Lee		LAMBRECHT, CHRISTOPHER M				
Dept. Electrical	l and Electronic Engine	ering				
Yonsei Univversity			ART UNIT	PAPER NUMBER		
134 Shinchon-I	Ding, Seodaemoon-Gu	2611				
Seoul 120-749, KOREA, REPU		DATE MAILED: 02/24/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

								
Office Action Summary		Applicati	on No.	Applicant(s)				
		09/730,5		LEE, CHULHEE				
	Omce Action Summary	Examine		Art Unit				
	The MAN INCOME.		er M Lambrecht	2611				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
THE M - Extens after S - If the p - If NO p - Failure Any re	PRTENED STATUTORY PERIOD FO MAILING DATE OF THIS COMMUNIC sions of time may be available under the provisions of IXIX (6) MONTHS from the mailing date of this commu- period for reply specified above is less than thirty (30 period for reply is specified above, the maximum state to reply within the set or extended period for reply viply received by the Office later than three months af dipatent term adjustment. See 37 CFR 1.704(b).	CATION. of 37 CFR 1.136(a). In no eventication. of days, a reply within the starture period will apply and will, by statute, cause the approximation.	ent, however, may a reply be ti tutory minimum of thirty (30) da ill expire SIX (6) MONTHS fron dication to become ABANDON	mely filed ys will be considered time n the mailing date of this c ED (35 U.S.C. § 133).				
Status								
1)	Responsive to communication(s) filed	d on .						
· · · · ·		b)⊠ This action is r	ion-final.					
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Dispositio	on of Claims							
5)	Claim(s) <u>1-28</u> is/are pending in the apotal Of the above claim(s) is/are Claim(s) is/are allowed. Claim(s) <u>1-28</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restrict	e withdrawn from co						
Application	on Papers							
10)⊠ T	The specification is objected to by the fine drawing(s) filed on <u>07 December</u> Applicant may not request that any object Replacement drawing sheet(s) including the oath or declaration is objected to	2000 is/are: a)⊠ a tion to the drawing(s) I the correction is requir	oe held in abeyance. Se red if the drawing(s) is ob	ee 37 CFR 1.85(a). Djected to. See 37 C	FR 1.121(d).			
Priority u	nder 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
Attachment(s) of References Cited (PTO-892)		4) Interview Summary	/ (PTO-413)				
2) 🔲 Notice 3) 🔲 Inform	of Draftsperson's Patent Drawing Review (PT ation Disclosure Statement(s) (PTO-1449 or FNo(s)/Mail Date		Paper No(s)/Mail D 5) Notice of Informal I 6) Other:	ate	O-152)			

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DETAILED ACTION

Claim Objections

1. The claims in this application do not commence on a separate sheet or electronic page in accordance with 37 CFR 1.52(b)(3). Appropriate correction is required in response to this action.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1, 5, 10, 11, 15, 16, 18, 22, 23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,412,111 to Cato (hereinafter "Cato") in view of U.S. Patent Application Publication No. 20020059610 to Ellis (hereinafter "Ellis").

With regard to claims 1 and 5, Cato discloses a method for transmitting and capturing information of a future program (col. 4, ll. 45-60) whose preview is currently being broadcast between regular programs comprising (col. 7, ll. 35-40):

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a television (108, fig. 1);
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a remote control (110, fig. 1);

a preview for a future program (col. 4, 11. 35-47);

program information for said future program (col. 4, 11. 56-60);

sending means that transmits said program information, comprising closed caption text (col. 4, ll. 45-50 and 60-62);

indicating means for indicating that said program information is being transmitted, comprising a special mark displayed on said television (col. 4, 1l. 45-50 and col. 7, 1l. 27-33);

saving means for directing said television to save said program information (col. 4, ll. 60-65) in case that a viewer chooses to watch (col. 9, ll. 17-21, 62-65, and col. 10, ll. 8-21), comprising a saving button on said remote control (110, col. 10, ll. 54-63; button corresponding to "capture" signal);

reviewing means that displays a list of chosen programs (col. 12, ll. 38-47);

alerting means that alerts viewers to a chosen program when it is about to be broadcast (col. 12, ll. 8-16);

updating means that changes the operations that is to be operated on said chosen programs (means for editing list of programs, col. 5, ll. 15-23 and col. 12, ll. 44-47); and recording means (106, fig. 1).

Cato fails to disclose a reviewing button on said remote control.

In an analogous art, Ellis discloses a reviewing button on a remote control for displaying a list of chosen programs (¶0086, 0087), for the purpose of enabling the user to access the list of chosen programs (¶0087).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the remote control of Cato to include a reviewing button, as taught by Ellis, for the purpose of enabling the user to access the list of chosen programs and review the programs therein.

With regard to claims 10, 11, 15, 16, 22 and 23 Cato discloses a method for transmitting and capturing information of a plurality of future program (col. 4, 1l. 45-60 & col. 5, 1l. 15-17) whose preview is currently being broadcast between regular programs comprising (col. 7, 1l. 35-40):

```
a television (108, fig. 1);
a remote control (110, fig. 1);
previews for a plurality of future programs (col. 4, ll. 35-47 & col. 7, ll. 35-40);
program information for said future programs (col. 4, ll. 56-60);
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recording means (106, fig. 1).

sending means that transmits said program information, comprising closed caption text (col. 4, ll. 45-50 and 60-62);

indicating means for indicating that said program information is being transmitted, comprising a special mark displayed on said television (col. 4, ll. 45-50 and col. 7, ll. 27-33);

saving means for directing said television to save said program information (col. 4, ll. 60-65) in case that a viewer chooses to watch (col. 9, ll. 17-21, 62-65, and col. 10, ll. 8-21), comprising a saving button on said remote control (110, col. 10, ll. 54-63; button corresponding to "capture" signal);

reviewing means that displays a list of chosen programs (col. 12, ll. 38-47);

alerting means that alerts viewers to a chosen program when it is about to be broadcast (col. 12, ll. 8-16);

updating means that changes the operations that is to be operated on said chosen programs (means for editing list of programs, col. 5, ll. 15-23 and col. 12, ll. 44-47); and

Cato fails to disclose said preview comprises a textual advertisement of a future program; and, a reviewing button on said remote control.

Official notice is taken of the fact that it is well known in the art for a preview for a future program to comprise textual advertisement including at least a title, names of actors (description), and/or a future broadcast date and time of upcoming programs, for the purpose of arousing viewer interest and enabling a viewer to plan consumption of said future programs.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify the preview of Cato to include textual advertisement including at least a title, brief description, and/or a future broadcast date and time of future programs, for the purpose of arousing viewer interest and enabling a viewer to plan consumption of the future programs.

Additionally, in an analogous art, Ellis discloses a reviewing button on a remote control for displaying a list of chosen programs (¶0086, 0087), for the purpose of enabling the user to access the list of chosen programs (¶0087).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the remote control of Cato to include a reviewing button, as taught by Ellis, for the purpose of enabling the user to access the list of chosen programs and review the programs therein.

As for claims 9, 21, and 28, Cato and Ellis together disclose the method in accordance with claims 5, 15 and 22. However, they fail to disclose said recording means comprises video and audio codec, control units and a hard drive.

Official notice is taken of the fact that recording means are well known in the art to comprise video and audio codec, control units, and a hard drive, for the purpose of encoding and compressing television content into a digital format which can then be stored on a storage device providing improved access time.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the recording means of Cato and Ellis to include video and audio codec, control units, and a hard drive, for the purpose of encoding and compressing television content into a digital format which can then be stored on a storage device providing improved access time.

With regard to claims 18 and 25, Cato and Ellis together disclose the method in accordance with claims 15 and 22. In addition, Cato discloses said saving means comprises a saving button on said remote control (col. 10, ll. 54-63; button corresponding to "capture" signal). Furthermore, Ellis discloses a selection mode (watch list, fig. 19), means to select a program from said future programs when said selection mode is activated (¶0087), and an exit button (1908, fig. 19) to exit said selection mode.

Cato and Ellis fail to disclose numerical buttons on said remote control to select a program.

Official notice is taken of the fact that it is well known in the art to employ numerical buttons provided on a remote control device to select programs, for the purpose of enabling the user to select a program without having to manipulate a cursor.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the saving means of Cato and Ellis to include numerical buttons on said remote control to select a program, for the purpose of enabling the user to select a program without having to manipulate a cursor.

4. Claims 2, 6, 12, 17 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cato and Ellis as applied to claims 1, 5, 10, 15 and 22 above, and further in view of U.S. Patent No. 5,699,125 to Rzeszewski et al. (hereinafter "Rzeszewski").

As for claims 2, 6, 12, 17 and 24, Cato and Ellis together disclose the method in accordance with claim 1, 5, 10, 15, and 22. In addition, Cato discloses said program information comprises a local time of a television station that is broadcasting said preview/textual advertisement (time/date for setting display device clock, col. 8, ll. 8-10), titles of said future programs (see fig. 14 and col. 10, ll. 18-29 of U.S. Patent 5,552,833 to Henmi et al., incorporated by reference in Cato, col. 7, ll. 60-62), broadcasting dates of said future programs (col. 4, ll. 57-60), broadcasting times of said future programs (col. 4, ll. 57-60), channel numbers of said future programs (col. 4, ll. 57-60), and descriptions of said future programs (col. 5, ll. 17-23).

Cato and Ellis fail to disclose said program information comprises duration of said future programs.

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In an analogous art, Rzeszewski discloses program information comprising a duration of a future program (col. 4, ll. 28-33). Providing the duration of a program provides the benefit of enabling the user to quickly ascertain the length of a particular program.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program information of Cato and Ellis to include the duration of said future programs, as taught by Rzeszewski, for the purpose of enabling the user to quickly determine the length of said future programs.

5. Claims 3, 7, 13, 19 and 26, rejected under 35 U.S.C. 103(a) as being unpatentable over Cato and Ellis as applied to claims 1, 5, 10, 15 and 22 above, further in view of U.S. Patent No. 4,620,229 to Amano et al. (hereinafter "Amano") and further in view of U.S. Patent No. 5,153,580 to Pollack (hereinafter "Pollack").

With regard to claims 3, 7, 13, 19 and 26, Cato and Ellis together disclose the method in accordance with claims 1, 5, 10, 15 and 22. In addition, Cato discloses said alerting means comprises audio signal which alerts viewers aurally (col. 9, 11. 39-40) and video signal which alerts viewers visually (col. 7, 11. 26-33).

Cato and Ellis fail to disclose automatic turn-on means which turns on said television automatically when it is turned off, and automatic turn-off means which turns off said television in case that there is no pushing activity of said remote control for a certain duration of time after said television is automatically turned on.

In an analogous art, Amano discloses automatic turn-on means which turns on said television automatically when it is turned off (col. 11, ll. 15-32), for the purpose of preventing a user from missing a television show he/she is interested in watching (col. 1, ll. 35-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the alerting means of Cato and Ellis to include automatic turn-on means which turns on said television automatically when it is turned off, as taught by Amano, for the purpose of preventing a user from missing a television show he/she is interested in watching. Cato, Ellis, and Amano fail to disclose automatic turn-off means which turns off said television in case that there is no pushing activity of said remote control for a certain duration of time after said television is automatically turned on.

In an analogous art, Pollack discloses automatic turn-off means which turns off said television in case that there is no pushing activity of said remote control for a certain duration of time (col. 3, ll. 30-34, 55-63, and col. 4, ll. 1-5), for the purpose of saving power without inadvertently turning off the television when a viewer may be interested in a current program (col. 1, ll. 25-41).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the alerting means of Cato, Ellis, and Amano to include automatic turn-off means which turns off said television in case that there is no pushing activity of said remote control for a certain duration of time, as taught by Pollack, after said television is automatically turned on, for the purpose of saving power without inadvertently turning off the television when a viewer may be interested in a current program.

6. Claims 4, 8, 14, 20 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cato and Ellis as applied to claims 1, 5, 10, 15 and 22 above, and further in view of U.S. Patent No. 5,699,107 to Lawler et al. (hereinafter "Lawler").

With regard to claims 4, 8, 14, 20 and 27, Cato and Ellis together disclose the method in accordance with claim 1, 5, 10, 15 and 22. In addition, Cato discloses wherein said updating means comprises deleting means which delete a program from said chosen programs (col. 5, ll. 17-24), selecting means which selects a program from said chosen programs (wherein deleting programs from said a list,

col. 5, ll. 17-24, inherently involves means for selecting programs from said list), and recording toggling means which toggles a recording option for a program of said chosen programs (where said chosen programs on said list are to be recorded, col. 4, ll. 35-40, and programs to be recorded may be deleted from said list, col. 5, ll. 17-24). Furthermore, Ellis discloses a delete button on said remote control (1910, fig. 19, ¶0087).

Cato and Ellis fail to disclose said updating means comprises volume up and down buttons on said remote control, periodic watching toggling means which toggles a periodic watching option for a program of said chosen programs comprising a recalling button on said remote control, and an entering button on said remote control.

In an analogous art, Lawler discloses periodic watching toggling means which toggles a periodic watching option for a program of said chosen programs (col. 13, ll. 18-21 & 39-47), for the purpose of enabling the user to alter a reminder for a particular program (col. 13, ll. 18-21), and an entering button (action key, 70, fig. 2) on said remote control (col. 10, ll. 28-36), for the purpose of enabling the user to perform a desired action (col. 10, ll. 28-36).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the updating means of Cato and Ellis to include periodic watching toggling means which toggles a periodic watching option for a program of said chosen programs, and an entering button on said remote control, as taught by Lawler, for the purpose of enabling the user to alter a reminder for a particular program and enabling the user to perform a desired action.

Cato, Ellis and Lawler fail to explicitly disclose said updating means comprises volume up and down buttons on said remote control; a recalling button on said remote control, and a delete button on said remote control.

Official notice is taken of the fact that it is well known in the art to provide volume up and down buttons and a recall button and an entering button on a remote control enabled to adjust the volume of the

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television and recall a previously viewed channel, respectively, as well as perform menu navigation (such as program selection) and toggling functions, for the purpose of minimizing the number of buttons on the remote control and simplifying the layout of said remote control.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the updating means of Cato and Ellis to include volume up and down buttons and a recall button on said remote control for the purpose of minimizing the number of buttons on the remote control and simplifying the layout of said remote control.

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Conclusion

7. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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- year or printed hame of person signing and certificate.
Signature:

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M Lambrecht whose telephone number is (703) 305-8710. The examiner can normally be reached from 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached at (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher M Lambrecht Examiner Art Unit 2611

CML

PRIMADY EXAMINER

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